CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

PUBLIC-PRIVATE PARTNERSHIPS (P3) PRIMER

December 3, 2010

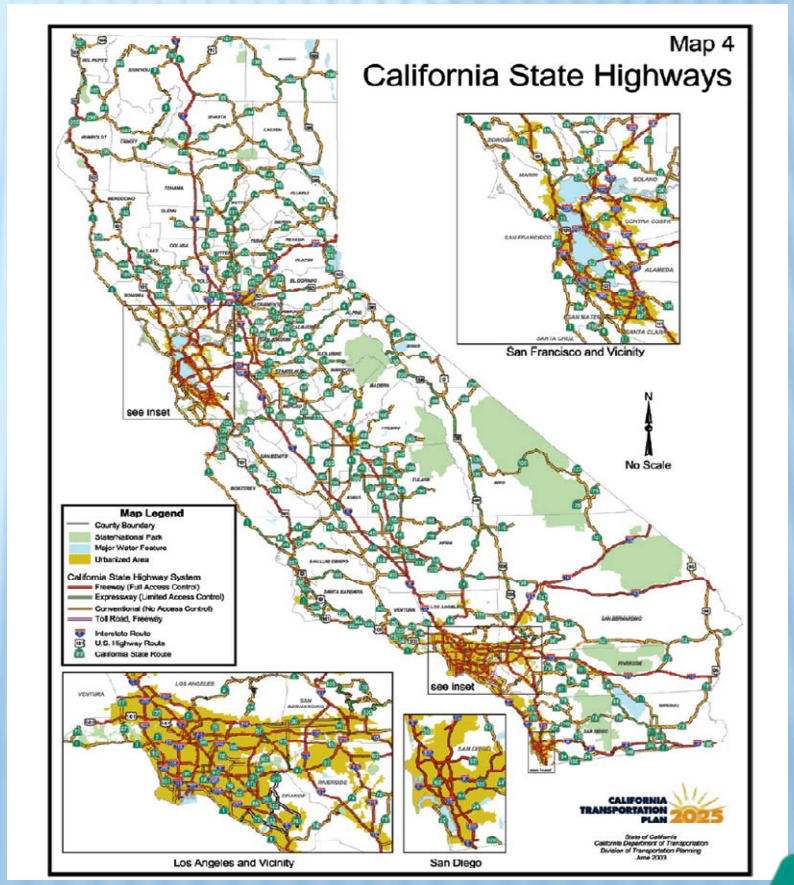
TRANSP. FINANCING IN CA

- Limited Traditional Revenue Sources
  - Fuel & Excise Tax
  - Sales Tax
  - Tolls
  - Developer Funds
- Bond Funds (GARVEE, Proposition 1B)

CALIFORNIA TRANSP. SYSTEM

California's system is one of the largest and most complex in the country

- Approximately 50,000 miles of highway and freeway lanes
- Approximately 295,000 miles of local streets and roads
- Supports 37 Million…
- …60 Million by 2050



TRANSP. FINANCING IN CONTEXT

- California GDP is about $1.8 trillion
  - Like Brazil, Italy
  - 8th Largest Economy
- Typical Infrastructure Investment (OECD)
  - Need 2-2.5% of GDP
  - $400-500 billion in next 10 years
  - $80-150 billion in private capital @ 20-30% of need

OTHER P3S…

- **Critical Percentage of National Roadway Networks**
  - Portugal: 94% of Motorway System under P3s
  - Spain: 43% of Motorway System under P3s
  - UK: 10% of Motorway System under P3s
- **Highway P3s Are NOT Exclusively Financial Transactions**
- **Highway P3s Do NOT "Automatically" Require User Fees**
- **Maximum Contract Period Observed Was 50-Years**
  - Most ranged from 30-40 years

COURSE OBJECTIVES

- P3 Defined
- Objectives of P3
- Benefits of P3s
- Types of P3s
- Elements of a P3 Agreement
- History of Public-Private Partnerships in California
- Potential P3 Projects in California
- Other P3 Applications
- Conclusion

P3 DEFINED…

"A Public-Private Partnership (PPP) is a contractual agreement between a public agency and a private sector entity…(through which) the skills and assets of each sector are shared in delivering a service or facility... In addition to the sharing of resources, each party shares in the risks and rewards potential…"

-NCPPP Website

OBJECTIVES OF P3

- Maximize the ability of public sponsors to leverage existing revenue sources.
- Make possible major infrastructure investments that might not otherwise receive financing.
- More effectively use of existing public funds.
- Accelerate projects into construction compared to traditional delivery methods.
- Transfer Prudent Risk to Private Sector
- Capture Private Sector Innovation
- Promote Life Cycle Efficiencies/Performance
- Create Competitive Tension to Drive Value

BENEFITS OF A P3

- Public- Leverages partnerships allow for infrastructure to be completed in a timely and cost-effective manner.

- Private- Provides additional revenue by putting more projects into production and additional incentives for assuming risks associated with the project.

P3 TYPES…

- Long-Term Concession or Lease
- Design-Build-Finance-Operate-Maintain (DBFOM)
- Design-Build-Operate-Maintain (DBOM)
- Design-Build-Finance (DBF)
- Design-Build (DB)
- Pre-Development Agreements

PRE-DEVELOPMENT AGREEMENT

- Early Private Partner Involvement
  - Typically during environmental phase
  - Projects in early stages of definition
  - Technically challenging projects
- Selection based on qualifications and project benefits from this approach or 'business case'
- Private Partner may undertake pre□development work at risk, or with shared public sector risk
  - Private Partner gets first right to negotiate development agreement
- If agreement not reached; public sponsor has fully developed project

DESIGN/BUILD

- Designer and contractor hired under single contract
  - Selection usually based on best value
- Private partner takes majority of design and construction risk
  - Potential for private sector innovation
  - Greater cost and schedule certainty
- Public sector has single point of contact
  - Design and construction disputes typically remain between designer and contractor
- Public sponsor retains obligation to fund
- Public sector retains full maintenance and operations responsibilities

DESIGN/BUILD/FINANCE

- Similar to Design/Build
  - Public Sponsor provides revenue stream
  - Private Partner takes financing risk
- Public Sponsor retains operational and maintenance obligations
- Procurement generally based on lowest annual payment
- Off balance sheet financing
  - Revenue stream typically subject to prior appropriations
  - Generally does not count against bonding caps

DESIGN/BUILD/OPERATE/MAINTAIN

- Similar to Design/Build
- Private partner has long term operational and maintenance responsibility
  - Like an extended warranty
- Transfers life□cycle costs to Private Partner
  - Balances upfront capital costs v. long term maintenance costs
- Public Sponsor responsible for revenue and financing
- Suited for facilities with specialized operational and/or maintenance requirements

DESIGN/BUILD/FINANCE/OPERATE/ MAINTAIN

- Similar to DBOM
- Private Partner is responsible for financing
- Public Sponsor responsible for revenue stream
- Applicable to both revenue and non□revenue facilities
- Also referred to as Availability Payment
  - Private Partner required to have facility "available"
  - Annual payment is a function of facilities "availability"
- Suitability
  - Where transfer of revenue risk may not be best value for money

CONCESSION

- Greatest risk transfer model
  - Design, Construction, Revenue, Finance, Operations, Maintenance, Capital Renewal
  - Potentially includes capacity expansions
- Public Sponsor retains least control
  - Rate Setting
  - Operational/Performance Standards
- Payments to Public Sponsor
  - Upfront payment
  - Revenue Sharing
  - Unplanned refinancing
  - Excess revenue

ELEMENTS OF A P3 AGREEMENT

- Risk Allocation
- Performance Requirements
- Payment Mechanisms
- Financial Terms
- Termination Options
- Handback Requirements

ELEMENTS OF A P3 AGREEMENT

	Design	Construction	Finance	Maintenance	Operation
Design Bid Build (traditional)	○	○	○	○	○
Design Build	●	●	○	○	○
Design Build Finance	●	●	●	○	○
Design Build Finance Maintain	●	●	●	●	○
Design Build Finance Operate Maintain	●	●	●	●	●

○ - Risk retained by Public Sector
● - Risk transferred to Private Sector

ELEMENTS OF A P3 AGREEMENT

- Identify whether the risk is:
  - Retained
    - Be responsive; Don't contribute to additional risk retention
  - Shared
    - Cooperate with all involved
  - Transferred
    - Provide assistance without taking control
- Changes transfer the risk to the public sector
  - Identify downstream impacts
  - Quantify impact early
  - Work cooperatively with P3 partner
  - Make concessions
  - Reach agreements

TYPICAL RISKS
PRE CONSTRUCTION PHASE

Development

- Public acceptance
- Control
- Political stability

Financing

- Market acceptance
- Credit quality of project
- Interest rates
- Tax treatment
- Currency/foreign exchange

TYPICAL RISKS
CONSTRUCTION PHASE

Design, Engineering and Construction

- Site conditions
- Environmental
- Cost
- Changes in project scope
- Completion
- Liability/Latent Defects
- Regulatory/Permitting

TYPICAL RISKS
OPERATION AND MTCE PHASE

Operation and Maintenance

- Asset performance in real toll projects
- Operator's performance in availability payment projects
- Costs

Revenue

- Economic factors
- Debt service obligations
- Return on equity

Changes in Law

Handback

Termination

ELEMENTS OF A P3 AGREEMENT

Payment Mechanisms:

- Hard Tolls
- Shadow Tolls
- Availability Payments
- Milestone Payments
- Performance Payments

FINANCIAL ELEMENTS

Financial Plan Requirements

- Financing strategy – how developer plans to finance the project
- Financial Model
- Equity Finance – Equity commitment to the Project
- Project debt – Proposed project debt structure
- Refinancing
- Hedging strategy
- Taxation

FINANCIAL ELEMENTS

Financial Model Specifications

Financial Model was to include:

- Assumptions
- Calculations

Key Outputs include:

- Financial Statements
- NPV calculations, including NPV of MAP
- Project and Equity IRR

HISTORY OF P3S

AB 680 (1989)

- Authorized Caltrans to enter into P3 agreements for up to 4 Demonstration Projects
- Authorized up to a 35-year lease on these facilities
- Authorized the developers to charge tolls on the privately constructed facilities
- Two projects made it to construction (SR 91 Express Lanes & SR 125 South Bay Express)

SR 91 EXPRESS LANES

- Opened to traffic December 1995
- First privately financed toll road in the United States
- First fully-automated toll facility
- 4-lane, 10-mile toll road in the median between Orange/Riverside County line and SR 55
- Operated by OCTA

HISTORY OF P3S ...CONTINUED

AB 1467 (2006)

- 4 P3 Projects (2 North & 2 South)
- Primarily for Goods Movement
- Limited Toll Authority
- Non-compete Provisions
- Nominations from Caltrans and Regional/Local Transportation Entities
- Legislative Approval of Agreement

HISTORY OF P3S ...CONTINUED

- Senate Bill 4 (SBX2 4) Approved February 2009 is most recent P3 authorization
- Authorizes Caltrans and Regional Transportation Agencies to implement P3 Projects
- Transportation Projects include Highways, Transit and Rail
- No Limit on Number of Projects
- Established Public Infrastructure Advisory Commission (PIAC)
- Sunsets January 1, 2017

SENATE BILL 4 (SBX2 4)

- CTC approval of nominated projects
  - Improved mobility
  - Improved operation or safety
  - Air quality benefits
  - Address known forecast demand
- CTC approval of best value evaluation criteria and (for Caltrans projects only) certification of useful life determination
- Public hearing by procuring agency on P3 agreement
- Review and comment by Legislature and PIAC

P3 OPPORTUNITIES

Consists of Projects that:

- meet a high-priority transportation need;
- enjoy significant public and political support;
- have or soon will have achieved sufficient environmental readiness;
- show the promise of greater value – including speed of delivery – than conventional procurement; and
- have the potential to generate revenue or enhance program capacity through better leverage or other means.

PIPELINE P3 PROJECTS

- **I-710 Freight Corridor ($6.7 billion)**

  Add two dedicated truck lanes in each direction as well as one mixed flow lane in each direction, between the Ports of Los Angeles and Long Beach and State Route 60, near downtown Los Angeles. Additionally, several interchanges along this corridor will be improved.

- **I-710 Tunnel ($4.5 to $9 billion)**

  Gap closure to connect I-710 to I-210 and is considered critical to improving traffic and air quality in the area. Additionally, this gap closure will alleviate traffic on several local and interstate freeways.

- **High Desert Corridor ($2.5 billion)**

  Add a four- and six-lane new freeway/highway as well as widen some segments to eight lanes [including one HOV lane in each direction].

Caltrans

PIPELINE P3 PROJECTS

- **MTC Express Lane Network ($6 billion)**

  (Expand mobility options by creating a seamless 800-mile network of unobstructed lanes to provide a faster commute for travelers who use them.)

- **Route 101 Doyle Drive (Presidio Parkway) ($954 million)**

  (Replace existing Doyle Drive facility, constructed in 1936-1937, with a new six-lane facility. The Project will improve the seismic, structural, and traffic safety of this roadway which serves over 120,000 vehicles per day.)

CHALLENGES

- Valuation of Alternative Approaches
- Appropriate Risk Transfer
- Transparency and Public Participation
- Unavoidable Complexity of Transactions
- Perceptions
  - Non-compete clauses are always part of P3s
  - A PPP is a synonym for tolls and with that toll increases are inevitable…windfall profits.
  - The public sector loses total control of the facility

CONCLUSIONS…

- Infrastructure funding and delivery lagging behind need
- P3s are not cure all solutions and not applicable to all projects
- P3s will not solve the serious lack of infrastructure funding
- P3s are necessary tools for infrastructure delivery now and in the future

HELPFUL LINKS…

- www.fhwa.dot.dot.gov/ipd/p3/index.htm
- www.ncppp.org/index.shtml
- http://www.publicinfrastructure.ca.gov/
- http://www.dot.ca.gov/hq/innovfinance/